



# THOMAS S. WOOTTON HIGH SCHOOL COMMENCEMENT

*Remarks by*  
NASA ADMINISTRATOR CHARLES BOLDEN

Washington, D.C.  
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AS PREPARED FOR DELIVERY

To Principal Boldon – great last name, by the way! – Assistant Principal Dovman, Assistant Principal Du Boyce, Assistant Principal Mamana the 3<sup>rd</sup>, and Administrator Lightsey ... to all the wonderful teachers and staff who are with us ... to all the Parents, and loving families and friends ... it is an honor to join you here today for this very special, momentous occasion.

Here's my favorite part ... to the Class of 2016 ... congratulations! You did it!

Graduation is an exciting time, and I know it can be an anxious time as well. With this in mind, I thought I'd tell you a quick story. I usually refer to it as "Hoot's Law" but perhaps for this occasion, in honor of all of you at Thomas S. Wootton High School, we can call it "Woot's Law" just for today.

Hoot's – or Woot's – law is named for a good friend and mentor of mine, Robert "Hoot" (Woot!) Gibson. He's a former Naval Aviator and NASA astronaut who, as the Commander for my first Space Shuttle mission, responsible for the training for our shuttle crew and me as I was working toward my first flight into space. If you can picture this, I was surrounded by my new six fellow crewmembers in a shuttle simulator. I was nervous because I really wanted to make a good impression on my crewmates and I'm not ashamed to say I was sweating profusely. During the simulator, as is tradition, all was going well until it wasn't. A shuttle main engine went out, boom, right at liftoff, and while working through our procedure to determine the cause of the engine failure, a minor electrical issue popped up – a distraction from the real problem. Instead of focusing on the cause of the engine failure, I worked to fix the electrical issue, misdiagnosed the minor electrical problem and accidentally killed the power to a second engine – now leaving only a single working engine – not enough to get us to orbit.

Now, instead of alive in the air, we were all dead in the ocean. All went quiet. Hoot, my commander, reached over, gave me a good pat on the shoulder and said, “Charles, did I ever tell you about ‘Hoot’s Law’?”

When I responded that he hadn’t, Hoot said: *“It goes like this: no matter how bad things get, you can always make them worse.”*

You know what? Stuff happens. Robert Kennedy once said, *“Only those who dare to fail greatly can ever achieve greatly.”*

There will be good days. There will be bad days. There will be days when you make stuff a little worse or a little better for the folks around you.

The key is take a deep breathe, relax and remember that you are neither the first person nor the last who will have faced adversity.

Scripture teaches that *“what has been will be again, what has been done will be done again; there is nothing new under the sun.”*

As the Administrator of NASA, an agency where we are learning new things about the Sun, Earth and the infinite universe surrounding us every single day, I can attest that although the discoveries may be new, the very human challenges all of us face throughout our lives are the same.

So as you face these challenges, I hope you’ll keep in mind that you are not alone. You’ve gotten to today because of the help and sacrifice other people in your life – be they your parents, your family, your teachers, friends and others.

I hope you’ll know this as well. NASA needs you! In fact we’re counting on you.

You see, you all are part of what I like to call the space generation. Most of you have lived almost every day of your lives in times when we’ve had human beings from different countries living and working together in space. This past week I had the chance to spend some time with one of these incredible astronauts and a good friend ... Scott Kelly, who was in Washington D.C. to make visits to members of Congress and talk with our NASA employees about his one year mission on the Space Station only a few months after posting some beautiful pictures of Washington from his perch there in the International Space Station.

So many things that are a fact of life for you today, would have been unthinkable to my generation when I was in high school – Snap Chat, Facebook, Google, Instagram, Text Messages, Smartphones, GPS-Guided Cars, Streaming Movies on Netflix or Amazon, shopping on Amazon, Satellite Radio, Satellite television, the internet ... the list goes on and on.

Someday – and I promise you it will come sooner than you think – when you get to be my age and you’re talking with young folks in your own children’s’ and grandchildren’s’ generation, it will surely be a fact of life for them that human beings are living and working on Mars.

In fact, this will very likely be the case because someone in your generation – perhaps someone with us at DAR Hall today – will be one of the first human beings to set foot on Mars. Think about that for a second.

You see, at NASA we're on a Journey to Mars and this Journey will culminate in sending American astronauts to the Red Planet in the 2030s. Today, this Journey is well underway. We recently accepted a record number of applications for a new astronaut class – 18,300. The last class selected, the Class of 2013, – and this a great source of pride to me – numbered 8 members and has 4 men and 4 women.

Now, the same cannot be said for participation in the so-called STEM careers of science, technology, engineering and math. It's a priority of both the President's and of mine to reverse this trend so that more female students and more students from minority and other under-served populations will pursue careers in these areas.

Whatever path you choose to take, please know this: NASA needs you. In fact, we're waiting for you. Because getting to Mars is not a Journey any one Agency or person can undertake alone.

We need you to become teachers who will inspire your own students to reach for new heights. We need you to become engineers and scientists. We need you to become entrepreneurs who will start your own companies. We need you to become doctors who will treat our future astronauts and poets who will inspire them.

Along these lines, we need you to become painters and musicians, because the science tells us that both the left brain and the right brain matter when it comes to a nation's achievement in this new world.

We need you to become human resources professionals – one of our greatest achievements at NASA is that we've been rated the #1 best place to work in the federal government for four years in a row. We need you to be mentors, athletes, astronomers, carpenters, nurses, skilled machinists, saleswomen and men, attorneys, accountants, the list goes on and on.

My generation is counting on you complete this Journey and begin the next.

As you prepare for it, I want to issue you this challenge: Be bold, be fearless, dream big, and by all means, don't listen to anyone who tells you can't do something or you don't belong. Don't waste your time trying to explain yourself or your identity to anyone. Don't feel like you have to justify why you are where you are. This applies to the workplace or anywhere else.

In my younger days, my dream was to attend the U.S. Naval Academy and to serve my country – just as my father and my uncles had done in World War II, when African Americans had to fight for the right to serve in our Armed Forces. Growing up during the days of segregation, it was an uphill battle.

When I came of age, because of the color of my skin, no one in my South Carolina Congressional delegation would provide an appointment nor nomination to the Academy as was required for admission. So I wrote President Lyndon Johnson asking for help. I never got a response, but that possibly led to Congressman William Dawson of Illinois providing me the appointment I needed to be accepted.

After having to fight just for the opportunity to be admitted, my classmates at the Naval Academy did me the honor of electing me class president. Today, after a 34-year career in the Marine Corps, I have the honor of serving as Administrator of NASA under the nation's first Black President.

Having offered you a challenge, I want to leave you today with some advice: work hard, study hard, and don't be afraid of failure.

That third piece of advice is often the hardest for folks of all ages to comprehend, so I want to repeat it. It is ok to fail.

I opened with the story of "Woot's law." I want to close with a quote that reinforces a similar theme. It's actually the text of a commercial. You're probably a little young to have seen it, but perhaps your parents or grandparents in attendance will recognize it:

Quote: *"I missed more than 9,000 shots in my career. I've lost almost 300 games. 26 times, I've been trusted to take the game winning shot and missed. I've failed over and over and over again in my life. And that is why I succeed."*

Those are the words of the great Michael Jordan and I hope you'll take them to heart. I hope you'll take your own role in NASA's Journey to Mars to heart. I also hope that you'll have a splendid time celebrating this momentous occasion, surrounded by people you love.

May your joy, success and potential stretch all the way to Mars! Congratulations Class of 2016!